



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,148	06/16/2005	Morgan Kanflod	AC-100	9266
7590	10/30/2007		EXAMINER	
Mark P. Stone 25 Third Street 4th Floor Stamford, CT 06905			MACARTHUR, VICTOR L	
			ART UNIT	PAPER NUMBER
			3679	
			MAIL DATE	DELIVERY MODE
			10/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/539,148	KANFLOD ET AL.
	Examiner	Art Unit
	Victor MacArthur	3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 10 September 2007.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)                            4) Interview Summary (PTO-413)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)                            Paper No(s)/Mail Date. \_\_\_\_\_  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_                            5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/10/2007 has been entered.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Sanderson (U.S. Patent 1,994,792).

Claim 1. Sanderson discloses (fig.2) a coupling sleeve (6) connecting a threaded rock bolt (5) to an impact rock drilling machine (3, 2), said coupling sleeve comprising a first part (lower part of 6) provided with an internal thread (internal thread of 6 receiving 5) for connection of the rock bolt, and a second part (upper part of 6) provided with an internal thread (internal thread of 6 receiving 3) for connection of the rock drilling machine, characterized in that the second part comprises a locking device (15) arranged substantially transversely to a longitudinal axis (longitudinal axis of 6) of the coupling sleeve, said locking device cooperating with a region (2) on the rock drilling machine for preventing separation of the coupling sleeve and the rock

drilling machine, wherein percussion energy is transmitted from the rock drilling machine to the rock bolt during a percussion operation when the locking device is unloaded (in that 15 is loaded only to prevent rotational disassembly... note that applicant's own locking device 7 is in direct contact with tapered portion of 8 such that it is loaded to prevent rotation), and said locking device retains the rock drilling machine connected to the coupling sleeve when said rock bolt is disconnected from said coupling sleeve. The specific method of using is not germane to the issue of patentability of the device itself. See MPEP § 2113. It is well established by case law that it is the patentability of the product that is to be determined even though such claims are limited and defined by process steps. See *In re Thorpe et al*, 227 USPQ 964 (CAFC 1985). Therefore, the limitation "wherein percussion energy is transmitted from the rock drilling machine to... from said coupling sleeve" (lines 11-16 of claim 1) has been given only limited patentable weight as a functional intended use. If applicant truly seeks patentability based upon a method of using then a continuation with such method claims should be filed. Note that the Sanderson embodiment shown in figures 6 and 7 also anticipates applicants claim wherein element 25 is the locking device.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by Ponto (U.S. Patent 1,701,985) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ponto (U.S. Patent 1,701,985) in view of Sanderson (U.S. Patent 1,994,792).

Claim 1. Ponto discloses (fig.2) a coupling sleeve (7, 11) connecting a threaded rock bolt (2) to an impact rock drilling machine (1), said coupling sleeve comprising a first part (lower part of 7 and 11) provided with an internal thread (internal thread receiving 6) for connection of the rock bolt, and a second part (upper part of 7 and 11) provided with an internal thread (internal thread receiving 5) for connection of the rock drilling machine, characterized in that the second part comprises a locking device (14) arranged substantially transversely to a longitudinal axis (longitudinal axis of 11) of the coupling sleeve, said locking device cooperating with a region (region of 1 receiving 14) on the rock drilling machine for preventing separation of the coupling sleeve and the rock drilling machine. It appears that the Ponto coupling device is fully capable of performing the intended use of transmitting percussion energy from the rock drilling machine to the rock bolt during a percussion operation when the locking device is unloaded (in that 14 is loaded only to prevent rotational disassembly... note that applicant's own locking device 7 is in direct contact with tapered portion of 8 such that it is loaded to prevent rotation), such that said locking device retains the rock drilling machine connected to the coupling sleeve when said rock bolt is disconnected from said coupling sleeve, since the Ponto coupling is substantially identical to applicant's claimed coupling. Note that in a product claim, when the structure recited in the reference is substantially identical to that of the claims, claimed properties or functions are presumed to be inherent. Even if, for the sake of argument, the Ponto rock drilling machine is assumed not to be capable of generating percussion energy as claimed (i.e.,

that the Pronto machine is purely for churn drilling without any percussion); Sanderson teaches (figs.1-4) that internally threaded coupling sleeves that are used with churn drilling machines are also commonly used with percussion type drilling machines (p.1, ll.1-3). Therefore, even if the Ponto drilling machine is assumed to be a churn machine free of any impact, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the Ponto coupling with a impact rock drilling machine, as taught by Sanderson, since such couplings are commonly known to be usable with both impact and churn types of machines.

#### *Response to Arguments*

Applicant's arguments with respect to the claims have been considered but are moot in view of the new grounds of rejection. However, the following should be noted:

Note that element (1) of Ponto is an impact rock drilling machine in as much as element (2) of applicant's invention is. Also element (2) of Ponto is a rock bolt in as much as element (1) of applicant's invention is. Applicant has failed to identify any structural differences between applicant's disclosed impact rock drilling machine (2) and that of the prior art. Applicant has similarly failed to point out any rock bolt structural differences. Note also lines 1-5 on page 1 of Ponto, which discloses drill pipe and standard drilling strings that are necessarily and inherently capable of impacting and drilling rock. Accordingly, the components of Ponto are rock-drilling components in as much as the applicant's invention is. Applicant is reminded that where there is physical identity between the subject matter of the claim and the prior art, the label given to the claimed subject matter does not distinguish the invention over the prior art. In re Pearson, 494 F.

Art Unit: 3679

2d 1399, 1403, 181 USPQ 641, 644 (CCPA 1974); In re Lemin, 326 F. 2d 437, 140 USPQ 273 (CCPA 1964).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor MacArthur whose telephone number is (571) 272-7085. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.

October 25, 2007



Victor L. MacArthur  
Patent Examiner  
Art Unit 3679